



**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

**Patent Application**

**Inventors:** Krishnan Kumaran et al

**Case No.:** 15-11

**Serial No.:** 09/900,374

**Group Art Unit:** 2868

**Filing Date:** July 6, 2001

**Examiner:** Willie J. Daniel JR

**Title:** ASSIGNING FREQUENCY CHANNELS IN A CELLULAR SYSTEM

**SUPPLEMENTAL DECLARATION UNDER 37 C.F.R. § 1.132**

- 1) I, Simon C. Borst, make this Declaration to supplement my earlier Declaration that was submitted to the U.S. Patent & Trademark Office to support the above-listed patent application. My earlier Declaration was executed on June 2, 2005.
- 2) I am one of the joint authors of the article "Wireless Simulation and Self-Organizing Spectrum Management" by S.C. Borst et al, Bell Labs Technical Journal, vol. 2, no. 3 (summer 1997) pages 81 – 98 (Herein, referred to as the "Borst article"). In preparation for this Declaration, I reviewed the Borst article.
- 3) Based on my experience and review of the Borst article, I conclude that the Borst article discloses a process for simulating cellular wireless systems. In particular, the abstract; page 82, right col.; and page 83, 1<sup>st</sup> par., of the Borst article, e.g., disclose that a simulation tool W may be used to design and predict performance of a cellular wireless system prior to the system's implementation.
- 4) Based on my experience and review of the Borst article, I conclude that the Borst article also describes processes for assigning and updating channel assignments during operation of a cellular wireless system, i.e., in an already implemented system. For example, page 82, right col., of the Borst article states "We propose a new self-organizing channel allocation scheme called *interference-based dynamic channel allocation* (IB-

DCA), which allocates channels based on ... real-time interference snapshot of the current situation."

5) Based on my experience and review of the Borst article, I conclude that the Borst article does not however, disclose a process for assigning frequency channels or making lists of frequency channel rankings that performs simulations on an already implemented cellular wireless system. For example, page 82, right col.; page 83, right col.; page 84 right col.; page 90, right col.; and Figs. 1 -3 and 5 - 6 of the Borst article do not disclose or suggest that the IB-DCA process involves simulating a cellular wireless system during the system's actual operation.

6) Based on my experience and review of the Borst article, I conclude that page 82, right col.; page 83, right col.; page 84 right col.; page 90, right col.; and Figs. 1 -3 and 5 - 6 of the Borst article do not disclose using simulations to produce frequency channel assignments or lists of frequency channel rankings in an operating cellular wireless system. For example, the Borst article does not disclose using the simulation tool W to produce such frequency channel assignments or lists of rankings in a manner responsive to the receipt of input data from an operating cellular wireless system.

7) I herein certify that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I also understand that willful false statements and the like are punishable by fine, imprisonment or both under 18 U.S.C. 1001 and that willful false statements and the like may jeopardize the validity of the application-at-issue or any patent issuing thereon.

Executed on: December 12, 2005  
Date

Simon C. Borst  
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